

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

A 1. (original) A telephone call restriction apparatus for connection to a telephone line, comprising:

a controller having memory for storing call restriction data and at least one call restriction rule; and

50 a transceiver having conductors for receiving tone signals from and sending tone signals to the telephone line and conductors for sending digital signals to and receiving digital signals from said controller;

wherein said controller is programmed to detect that a call inhibition condition exists based on digital signals received from said transceiver, said call restriction data and said call restriction rule, and to cause an interference on said telephone line in response to detection of a call inhibition condition. 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 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6. (original) The apparatus as recited in claim 1, further comprising a circuit for supplying power to said controller and to said transceiver only when a telephone off hook condition is detected on the telephone line.

7. (original) The apparatus as recited in claim 1, further comprising a circuit for maintaining the interference on said telephone line until a telephone on hook condition of sufficient duration is detected.

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8. (currently amended) The apparatus as recited in claim 1, wherein the controller ceases the interference in response to detection of an on-hook condition inhibition and further, wherein comprising a circuit for resuming resumes the interference on said telephone line following a telephone off on hook condition of insufficient duration.

9. (original) The apparatus as recited in claim 1, wherein said controller comprises a microcontroller chip.

10. (original) The apparatus as recited in claim 1, wherein said controller is further programmed to change its mode of operation from a call restriction mode to a programming mode in which said controller is programmable in response to receipt of digital signals representing a predetermined authorization code from said transceiver, said steps of detecting a call inhibition condition and causing an interference on said telephone line being performed in said call restriction mode.

11. (original) The apparatus as recited in claim 10, wherein said controller is further programmed, when in said programming mode, to receive call restriction data from said transceiver and writing said call restriction data into said memory.

12. (original) A method for programming a call restriction device connected to a telephone line, comprising the following steps:

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establishing a connection between a telephone and a remote computer via the telephone line;

placing the call restriction device in a mode wherein the call restriction device is programmable;

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sending signals representing call restriction data from the telephone onto the telephone line;

2
sending signals representing said call restriction data from the remote computer onto the telephone line; and

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3 storing said call restriction data in the call restriction device so that the call restriction device, when in a call inhibition mode, will restrict calls on the telephone line in accordance with said stored call restriction data.

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13. (original) The method as recited in claim 12, further comprising the step of sending signals representing an authorization code from the telephone onto the telephone line prior to sending said signals representing call restriction data.

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14. (original) The method as recited in claim 12, further comprising the step of sending a voice prompt from the remote computer onto the telephone line, said voice prompt requesting input of call restriction data.

15. (original) The method as recited in claim 13, further comprising the step of sending a voice prompt from the remote computer onto telephone line, said voice prompt requesting input of said authorization code.

16. (original) A system comprising:

a telephone line;

a call restriction device connected to said telephone line and programmed to restrict calls on said telephone line in a call inhibition mode and to accept call restriction data in a programming mode;

a telephone connected to said telephone line; and

an interactive voice response system having an access number that is accessible via a public telephone switching network, wherein said interactive voice response system is programmed to perform the following steps:

sending a voice message requesting input of call restriction data while connected to said telephone line;

recognizing signals representing call restriction data returned via said telephone line following sending of said voice message requesting input of call restriction data; and

A sending signals representing said call restriction data while connected to said telephone line.

17. (original) The system as recited in claim 16, wherein said interactive voice response system is further programmed to perform the following steps:

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B1 sending a voice message requesting input of an authorization code while connected to said telephone line;

recognizing signals representing an authorization code returned via said telephone line following sending of said voice message requesting input of an authorization code; and

sending signals representing said authorization code while connected to said telephone line,

wherein said voice message requesting input of call restriction data is sent by said interactive voice response system only after detection of a predetermined signal indicating said authorization code is valid transmitted by said call restriction device.

18. (original) The system as recited in claim 17, wherein said call restriction device is programmed to perform the following steps:

validating said authorization code sent by said interactive voice response system; and

changing modes from a call inhibition mode to a programming mode and sending said predetermined signal to said telephone line after validation of said authorization code.

19. (currently amended) A method for programming a call restriction device connected to a telephone line, comprising the following steps:

establishing a connection between a computer and a destination station via the telephone line;

placing the call restriction device in a mode wherein the call restriction device is programmable;

inputting call restriction data into the computer;

sending signals representing the inputted call restriction data from the computer onto the telephone line;

~~sending signals representing said call restriction data from the remote computer onto the telephone line; and~~

storing said call restriction data in the call restriction device so that the call restriction device will operate in said call inhibition mode in accordance with said stored call restriction data.

20. (original) A telephone call restriction apparatus for connection to a telephone line, comprising:

memory for storing call restriction data in digital format and at least one call restriction rule;

a digital processor programmed to apply said call restriction rule to said call restriction data; and

a converter for converting tone signals on the telephone line into digital signals and converting digital signals from the digital processor into tone signals;

wherein said digital processor is further programmed to detect that a dialed telephone number belongs to a category of restricted telephone numbers and then restrict a call to a destination identified by said dialed telephone number in accordance with said call

~~restriction data.~~

21. (amended) A telephone call restriction system comprising:

a telephone line;

a telephone connected to said telephone line;

a call restrictor connected to said telephone line; and

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a remote computer communicative with said telephone and said call restrictor via said telephone line when a connection is established, said computer being programmed to automatically program said call restrictor based on call restrictions input via said telephone.

22. (amended) The system as recited in claim 21, wherein said remote computer is an interactive voice response system.

23. (original) The system as recited in claim 21, wherein said call restrictor comprises:

a controller programmed to transmit first and second control signals in response to detection of a call inhibition condition;

a DTMF transceiver having a port for outputting DTMF signals in response to receipt of said first control signal from said controller; and

a circuit that increases the amplitude of the DTMF signals output from said port of said DTMF transceiver signals in response to receipt of said second control signal from said controller.

24. (original) A method for preventing a telephone call to a restricted destination station, comprising the steps of:

monitoring a telephone line connected to a telephone;

detecting that a telephone number dialed on the telephone is restricted; and

generating a high-intensity DTMF signal on the telephone line in response to said detecting step, said high-intensity DTMF signal having sufficient intensity to interfere with a telephone call on the telephone line.

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25. (original) A telephone call restrictor programmed with call restrictions and having a programming mode and a call restriction mode, comprising:

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a controller that is programmable in said programming mode and that detects call inhibition conditions as a function of said call restrictions in said call restriction mode;

a DTMF transceiver having a port for outputting DTMF signals in both said programming mode and said call inhibition mode; and

a circuit that increases the amplitude of the DTMF signals output from said port of said DTMF transceiver signals, said circuit being active when said controller has detected a call inhibition condition and being inactive at other times.